

CLAIMS

1. A printing unit comprising:
 - at least one printing area or printing area-like portion;
 - a plurality of ink supply members for supplying inks different, in kinds, from each other to the printing area or printing area-like portion;
 - a plurality of detecting systems, each detecting an amount of the corresponding ink accumulated on the printing area or printing area-like portion; and
 - a control system for controlling the plurality of ink supply members to regulate an amount of ink supplied by each of the plurality of ink supply members so as to bring the amount of the corresponding ink accumulated into agreement with a predetermined value established for the ink detected.
2. The printing unit according to claim 1, wherein
the printing area or printing area-like portion is a part of a gravure printing cylinder immediately upstream a doctor blade wiping an excess ink off the gravure printing cylinder.
3. The printing unit according to claim 1, wherein
the printing area or area-like portion is a part of an offset gravure printing cylinder immediately upstream a doctor blade wiping an excess ink off the offset gravure printing cylinder.
4. The printing unit according to claim 1, wherein
the printing area or printing area-like portion is a part of an anilox roller of flexo printing immediately upstream a doctor blade wiping an excess ink off the anilox roller.
5. The printing unit according to claim 1, wherein
the printing area or printing area-like portion is an ink roller of offset printing.
6. The printing unit according to claim 1, wherein
the printing area or printing area-like portion is a part of a screen printing plate immediately upstream a squeegee wiping an excess ink off the

screen printing plate.

7. The printing unit according to claim 1, wherein each of the plurality of ink supply members includes an ink container, a pump to deliver the ink out of the container, and a nozzle to eject the ink to the printing area or printing area-like portion.
8. The printing unit according to claim 1, wherein each of the plurality of detecting systems includes a displacement sensor for detecting a surface portion of the accumulated ink.
9. The printing unit according to claim 8, wherein the control system controls a flow rate of the ink delivered from the pump of each of the plurality of ink supply members to the nozzle so that the surface position of the ink is brought into agreement with a predetermined level.
10. A manufacturing line for manufacturing an organic EL display, comprising:
 - a first coating unit for producing a processed printed film that includes a printed film and an adhesive layer thereon formed by coating an adhesive to the printed film; and
 - a laminating unit for laminating a processed multi-layered film including at least a barrier layer, a transparent or semi-transparent electrode, and an insulating layer to the processed printed film with automatic registration to produce a laminated film.
11. The manufacturing line according to claim 10, wherein the first coating unit includes a first feeder for feeding a film by unwinding the film from a first roll and a first printing unit for printing an image to the film to produce the printed film.
12. The manufacturing line according to claim 10, further comprising a second feeder for feeding the processed multi-layered film to the laminating unit by unwinding the processed multi-layered film from a second roll.

13. The manufacturing line according to claim 10, further comprising a second coating unit for applying a hole-injection material to the laminated film from the laminating unit to form a hole-injection layer on the laminated film to produce a hole-injection layer coating film.

14. The manufacturing line according to claim 13, further comprising a second printing unit for applying an organic EL ink to the hole-injection layer coating film to form a light emitting layer on the hole-injection layer coating film to produce a light emitting layer coating film.

15. The manufacturing line according to claim 14, further comprising a cutting unit for cutting the light emitting layer coating film to pieces of a desired dimension.

16. The manufacturing line according to claim 14, wherein the second printing unit comprises:

at least one printing area or printing area-like portion;

a plurality of ink supply members for supplying inks different, in kinds, from each other to the printing area or printing area-like portion;

a plurality of detecting systems, each detecting an amount of the corresponding ink accumulated on the printing area or printing area-like portion; and

a control system for controlling the plurality of ink supply members to regulate an amount of ink supplied by each of the plurality of ink supply members so as to bring the amount of the corresponding ink accumulated into agreement with a predetermined value established for the ink accumulated.